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Comply with the following WARNINGS and SAFETY INSTRUCTIONS while installing Liftgates. Refer to WARNING, CAUTION, and SAFETY INSTRUCTIONS decals on Liftgate.

WARNING

- Do not stand, or allow obstructions, under the platform when lowering the Liftgate. Be sure your feet are clear of the Liftgate.
- Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.
- Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.
- Make sure vehicle battery power is disconnected while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any
 objects clear of the inboard edge of the platform. Your feet or objects on the platform can become
 trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.
- Recommended practices for welding on steel parts are contained in the current AWS (American Welding Society) D1.1 Structural Welding Code - Steel. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.

SAFETY INSTRUCTIONS

- Read and understand the instructions in this Installation Manual before installing Liftgate.
- Before operating the Liftgate, read and understand the operating instructions.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are illegible or missing, replace them. Free replacement decals are available from **Maxon Customer Service**.
- Consider the safety and location of bystanders and location of nearby objects when operating the Liftgate. Stand to one side of the platform while operating the Liftgate.
- Do not allow untrained persons or children to operate the Liftgate.
- Wear appropriate safety equipment such as protective eyeglasses, faceshield and clothing while performing maintenance on the Liftgate and handling the battery. Debris from drilling and contact with battery acid may injure unprotected eyes and skin.
- Be careful working by an automotive type battery. Make sure the work area is well ventilated and there are no flames or sparks near the battery. Never lay objects on the battery that can short the terminals together. If battery acid gets in your eyes, immediately seek first aid. If acid gets on your skin, immediately wash it off with soap and water.
- If an emergency situation arises (vehicle or Liftgate) while operating the Liftgate, release the control switch to stop the Liftgate.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the power unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.

GPSLR INSTALLATION PARTS BOX

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
1	GUSSET, GPSLR MOUNT	8	268674-01
2	PLATE, GPSLR SUPPORT	6	268675-01
3	PLATE, GPSLR MOUNT	6	268676-01
4	CAP SCREW, 1/2"-20 X 2" LG, GRADE 8	12	900033-5
5	FLAT WASHER, 1/2" X 3/32" THICK	24	902013-13
6	LOCK NUT, NYLON, 1/2"-20	12	901008
7	TAPPING SCREW, #10-24 X 1/2" LG.	4	030444
8	ANGLE (STEEL), 2" X 2" X 1/8" X 6" LG.	2	901008

TABLE 4-1

OPTIONAL INSTALLATION JIG



INSTALLATION JIG PN 268592-01

VEHICLE REQUIREMENTS

CAUTION

The sliding axel assembly on a trailer can collide with a Liftgate mounted on the slide rails. To prevent damage to Liftgate and trailer, install stops on the slide rails to keep the sliding axels from hitting Liftgate. Refer to Liftgate clearance dimensions in this section of the manual.

NOTE: BODY maximum and minimum operating bed height: Maximum height is 53" (Unloaded). Minimum height is 46" (Loaded). On vehicle bodies equipped with swing-open doors, the platform may have to be modified to install this Liftgate.

NOTE: Make sure vehicle is parked on level ground while preparing vehicle and installing Liftgate.

NOTE: Dimensions are provided as reference for fitting Liftgate to vehicle body. For detailed ground clearance information, refer to the **WELD SIDE PLATE** procedure in this manual.

Check for correct clearances (FIGS. 5-1, 6-1 & 6-2) on vehicle to prevent interference between vehicle and Liftgate.



VEHICLE REQUIREMENTS - Continued



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FIG. 6-1

NOTE: For installation of this Liftgate, the maximum thickness of the vehicle floor and body is 6".



FIG. 6-2

STEP 1 - REMOVE SIDE PLATES

1. Disconnect conduit from right side plate as shown in FIG. 7-1.



FIG. 7-1

STEP 1 - REMOVE SIDE PLATES - Continued

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NOTE: Save bolts, nuts, and flat washers for reinstallation.

2. Unbolt side plates as shown in FIG. 8-1.



FIG. 8-1

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STEP 2 - WELD SIDE PLATE

NOTE: Parts box contains 2 angle steel pieces for positioning side plates under vehicle body. The angles allow side plates to be positioned and clamped to bottom of chassis crossmembers before welding the side plates.

1. Position RH side plate with rounded corners facing up (FIG. 9-1).



FIG. 9-1

- **NOTE:** Angle steel pieces must be butted against the side plate and flush with the edge of the side plate. Each angle must be positioned to butt against a chassis crossmember under the vehicle.
- 2. Clamp 2 pieces of angle steel to side plate as shown in **FIG. 9-1**.

NOTE: The instruction below only applies to trailers with 3" crossmembers. If trailer has 4" crossmembers, go to the next page.

NOTE: To mark a position between 2 crossmembers, attach tape from crossmember-tocrossmember. Remove slack before marking the tape.

3. For 3" trailer crossmembers, mark position for side plate on crossmember (**FIG. 10-1 and TABLE 10-1**).



SIDE VIEW - 3" TRAILER CROSSMEMBERS FIG. 10-1

BED HEIGHT	DISTANCE ("X")	EXPECTED GROUND CLEARANCE ("Y")
46"	10-3/8"	12-1/8"
47"	10-3/8"	13-1/8"
48"	10-3/8"	14-1/8"
49"	10-3/8"	15-1/8"
50"	10-3/8"	16-1/8"
51"	10-3/8"	17-1/8"
52"	9-1/8"	16-5/8"
53"	9-1/8"	17-5/8"

TABLE 10-1

NOTE: The instruction below only applies to trailers with 4" crossmembers. If trailer has 3" crossmembers, go to the previous page.

- **NOTE:** To mark a position between 2 crossmembers, attach tape from crossmember-tocrossmember. Remove slack before marking the tape.
- 4. For 4" trailer crossmembers, mark position for side plate on crossmember (FIG. 11-1 and TABLE 11-1).



FIG. 11-1

BED HEIGHT	DISTANCE ("X")	EXPECTED GROUND CLEARANCE ("Y")
46"	10-3/4"	12-5/8"
47"	10-3/4"	13-5/8"
48"	10-3/4"	14-5/8"
49"	9-9/16"	14-1/8"
50"	9-9/16"	15-1/8"
51"	9-9/16"	16-1/8"
52"	8-1/4"	15-5/8"
53"	8-1/4"	16-5/8"



5. Refer to FIG. 12-1. Measure the distance ("D") between slide rails. Then calculate dimension "Y" as follows: (52 7/8" - D) x 1/2 = Y

Example where D = 50": Y = (52 7/8" - 50") x 1/2, Y = 2 7/8" / 2, Y = 1 7/16"



 Adjust a combination square to the "Y" dimension (FIG. 12-2) or fabricate a spacer equal to the thickness of "Y".



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A CAUTION

To avoid personal injury, use at least 2 people to position the side plate.

 Line up end of the side plate with "X" mark on crossmember (FIG. 13-1A) and with the slide rail (FIG. 13-1B).





To protect the original paint system on the Liftgate, a 3" wide area of paint must be removed from all sides of the weld area before welding.

8. Tack weld side plate as shown in FIG. 14-1.



9. Remove clamps and the 2 angles.

10. Repeat 1 through 9 for the LH side plate.

11. Ensure the correct dimensions are held. For 3" crossmembers, refer to FIG. 15-1 and TABLE 15-1. For 4" crossmembers, refer to FIG. 15-1 and TABLE 15-2.



REAR SILL

CHECKING FOR CORRECT DIMENSIONS FIG. 15-1

BED HEIGHT	DISTANCE ("X")
46"	10-3/8"
47"	10-3/8"
48"	10-3/8"
49"	10-3/8"
50"	10-3/8"
51"	10-3/8"
52"	9-1/8"
53"	9-1/8"

3" CROSSMEMBERS TABLE 15-1

BED HEIGHT	DISTANCE ("X")
46"	10-3/4"
47"	10-3/4"
48"	10-3/4"
49"	9-9/16"
50"	9-9/16"
51"	9-9/16"
52"	8-1/4"
53"	8-1/4"

4" CROSSMEMBERS TABLE 15-2

CAUTION

To protect the original paint system on the Liftgate, a 3" wide area of paint must be removed from all sides of the weld area before welding.

NOTE: Support plates were made for crossmembers positioned at 12" center distance. If distance is less than 12", cut support plate to the applicable length.

12. Tack weld RH side plate and support plate to crossmembers **(FIG. 16-1)**. Repeat for LH side plate.



13. Weld RH side plate, support plates, and mount plates as shown in FIG. 17-1. Repeat step for LH side plate.



14. Weld gussets to RH side plate as shown in FIG. 17-2. Repeat step for LH side plate.



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FIG. 17-2

STEP 3 - PLACE SLIDER ASSEMBLY ON OPTIONAL JIG

NOTE: MAXON recommends using optional installation jig for lifting and maneuvering slider assembly under the vehicle.

Use forklift to place slider assembly on the installation jig. Ensure the slider assembly is:

- Centered on the jig (FIG. 18-1)
- Correctly supported by the jig (FIG. 18-2)



STEP 4 - BOLT ON LIFTGATE



BED HEIGHT
46"
47"
48"
49"
50"
51"
52"
53"

4 "	CROSSMEMBERS
	TABLE 19-2

SLOT

TOP TOP TOP MIDDLE MIDDLE MIDDLE BOTTOM BOTTOM

BED HEIGHT	SLOT
46"	MIDDLE
47"	MIDDLE
48"	MIDDLE
49"	MIDDLE
50"	MIDDLE
51"	MIDDLE
52"	BOTTOM
53"	BOTTOM

3" CROSSMEMBERS TABLE 19-1

STEP 4 - BOLT ON LIFTGATE - Continued

NOTE: Use the bolts, nuts, and flat washers from STEP 1 for bolting on the Liftgate.



STEP 5 - WELD ON EXTERNAL CONTROL & BRACKET

1. Reconnect conduit to right side plate as shown in **FIG. 21-1**.



RECONNECTING CONDUIT TO RH SIDE PLATE FIG. 21-1



Prevent damage to control box. Make sure installed control box does not protrude from the vehicle body.

CAUTION

To protect the original paint system, a 3" wide area of paint must be removed from bracket on all sides of the weld area before welding.

2. Weld the control box bracket to vehicle crossmembers on the RH side (curbside) near rear sill of vehicle (FIG. 21-2). REAR SILL CROSSMEMBER CROSSMEMBER CROSSMEMBER CONTROL BOX BRACKET

WELDING BRACKET TO CROSSMEMBERS FIG. 21-2

STEP 6 - BOLT ON INTERNAL CONTROL SWITCH

1. Use internal control switch bracket to mark and drill 4 holes for mounting next to vertical post (curb side). Bolt internal control box to vehicle body with self-tapping screws (FIG. 22-1).



INTERNAL

STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued

NOTE: MAXON recommends using dielectric grease on all electrical connections.



FIG. 23-1A

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STEP 6 - BOLT ON INTERNAL CONTROL SWITCH

RUNNING CONTROL BOX CABLE FIG. 24-1

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STEP 7 - RECOMMENDED LIFTGATE POWER CONFIGURATION

NOTE: Make sure the Liftgate power unit, and all batteries on the vehicle for the power unit, are connected correctly to a common chassis ground.



STEP 7 - RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued



STEP 8 - CONNECTING POWER

NOTE: MAXON recommends using dielectric grease on all electrical connections.

Connect power cable as shown in FIG. 27-1.



FIG. 27-1

STEP 9 - LEVELING PLATFORM



PLATFORM FLUSH WITH VEHICLE FLOOR FIG. 28-3

STEP 10 - FINAL BOLTING

- NOTE: Six holes must be drilled through each side of the slider frame to bolt RH and LH side plates to slider frame on the Liftgate. (See FIGS. 29-1A, 29-1B, 29-1C &
- 1. Use side plate as a template to drill 6 holes (1/2" dia.) in slider frame (FIG. 29-1A). Repeat for LH side.

SLIDER FRAME



FIG. 29-1A

STEP 10 - FINAL BOLTING - Continued

2. Bolt RH side plate to slider BOLTS (6 PLACES) frame as shown in FIG. 30-1. FLAT WASHER (6 PLACES) Repeat for LH side. Torque each SIDE bolt to **120 lb-ft**. PLATE 6860 FLAT WASHER 0.00 (6 PLACES) SLIDER LOCK NUT FRAME (6 PLACES) FIG. 30-1

STEP 11 - PLATFORM ADJUSTMENT

NOTE: Park vehicle on level ground and unload vehicle before doing this procedure.

- 1. Lower platform to ground and unfold flipover (FIG. 31-1A).
- Loosen adjustment and limit bolts on both sides of platform (FIG. 31-1B).
- Turn adjustment bolts counterclockwise to tilt the tip of platform up (FIG. 31-2), or turn clockwise to tilt down (FIG. 31-3).
- 4. Once platform is adjusted, tighten limit bolts securely on both sides of platform (FIG. 31-1B).



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STEP 12 - ATTACH SLIDING AXEL STOPS (IF REQUIRED)

CAUTION

The sliding axel assembly on a trailer can collide with a Liftgate mounted on the slide rails. To prevent damage to Liftgate and trailer, install stops on the slide rails to keep the sliding axels from hitting Liftgate. Refer to Liftgate clearance dimensions in this section of the manual.

If the Liftgate is mounted on a slide-axel trailer, attach stops on the slide rails to prevent the slide axels from hitting the Liftgate. Refer to the **VEHICLE REQUIREMENTS** section in this manual.

ATTACH DECALS (WITH SMART STOW)



DECAL P/N 268417-01

P/N 267431-01 (GPSLR-33) & P/N 267431-02 (GPSLR-44) FIG. 33-1

ATTACH DECALS - Continued WITH SMART STOW

SAFETY INSTRUCTIONS WARNING Read this information carefully. Read all decals and operation manual before operating liftgate Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate. Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions. 2. Be certain vehicle is properly and securely braked before using the liftgate. If there are signs of improper maintenance, damage to vital parts, or slippery platform surface, do not use the Liftgate until these problems have been corrected. If you are using a pallet jack, be sure it can be maneuvered safely. Always inspect this liftgate for maintenance or damage before using it. Do not use liftgate if it shows any sign of damage or improper maintenance. Do not operate a forklift on the platform. Do not allow any part of yours or your helper's body to be placed under, within, or around any portion of the moving Liftgate, or its mechanisms, or in a position that would trap them between the platform and the ground or truck when the Liftgate is 4 Do not overload I If a helper is riding the platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles. 5. Make certain the area in which the platform will open and close is clear before opening or closing the platform Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate. USE GOOD COMMON SENSE. If load appears to be unsafe, do not lift or lower it This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use. For a free copy of other manuals that pertain to this model Liftgate, please visit our website at www.maxonlift.com or call Customer Service at (800) 227-4116. A F A WARNING **OPERATING INSTRUCTIONS** Liftgate hazards can result Power On in crushing or falling. 1 Keep hands and feet clear of **□**< ത pinch points. < = 2) 2 Hand If riding liftgate, make sure load Switch is stable and footing is solid. Slide Out To Unstow Read and understand all instructions and WARNINGS before use. Manually 3) unfold using strap. **A CAUTION** শ **R**< Ö (4) Always stand clear of 2 Hand platform area. Raise С Switch **R**< 0 5 THE MAXIMUM CAPACITY 2 Hand **OF THIS LIFT IS** Switch Lower 3300 POUNDS Manually WHEN THE LOAD IS 6 fold using CENTERED ON THE LOAD strap. CARRYING PLATFORM B @°→ I< **GPSLR 33 ONLY** $\rightarrow \square$ 7 2 Hand \sim Switch Slide In To Stow THE MAXIMUM CAPACITY OF THIS LIFT IS IMPORTANT: Release switches when liftgate shuts off. 4400 POUNDS WHEN THE LOAD IS 8 **Power Off** -----> CENTERED ON THE LOAD D CARRYING PLATFORM B **GPSLR 44 ONLY**



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ATTACH DECALS (WITHOUT CONTROLLER)



P/N 282464-01 (GPSLR-33) & P/N 282464-02 (GPSLR-44) FIG. 35-1

ATTACH DECALS - Continued WITHOUT CONTROLLER

771-7713 SAFETY INSTRUCTIONS WARNING Read all decals and operation manual before operating liftgate Read this information carefully. Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate. Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions. If there are signs of improper maintenance, damage to vital parts, or slippery platform surface, do not use the Liftgate until these problems have been corrected. (888)certain vehicle is properly and securely braked before using the If you are using a pallet jack, be sure it can be maneuvered safely. Always inspect this liftgate for maintenance or damage before using it. Do not use liftgate if it shows any sign of damage or improper maintenance. Do not operate a forklift on the platform. Do not allow any part of yours or your helper's body to be placed under, within, or around any portion of the moving Liftgate, or its mechanisms, or in a position that would trap them between the platform and the ground or truck when the Liftgate is operated. FAX 4. Do not overload Make certain the area in which the platform will open and close is clear before opening or closing the platform. If a helper is riding the platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles. Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate. USE GOOD COMMON SENSE. 227-4116 . This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use. If load appears to be unsafe, do not lift or lower it. For a free copy of other manuals that pertain to this model Liftgate, please visit our website at www.maxonlift.com or call Customer Service at (800) 227-4116. E Α A WARNING (800)Liftgate hazards can result in crushing or falling. Keep hands and feet clear of 90670 pinch points. If riding liftgate, make sure load is stable and footing is solid. G CA Read and understand all instructions and WARNINGS before use. Springs, **ACAUTION** Always stand clear of Fe platform area. C Santa THE MAXIMUM CAPACITY **OF THIS LIFT IS** Ave. 3300 POUNDS WHEN THE LOAD IS **CENTERED ON THE LOAD** Slauson **CARRYING PLATFORM** В **GPSLR 33 ONLY** 11921 THE MAXIMUM CAPACITY OF THIS LIFT IS 4400 POUNDS WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM ഭ **GPSLR 44 ONLY DECAL SHEET**

FIG. 36-1

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DECAL POSITIONS



DECAL POSITIONS - Continued



SYSTEM DIAGRAMS PUMP & MOTOR SOLENOID OPERATION



TABLE 39-1

SYSTEM DIAGRAMS - Continued HYDRAULIC SCHEMATIC



FIG. 40-1

SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC (SMART STOW)



FIG. 41-1

SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC (WITHOUT CONTROLLER)



FIG. 42-1